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OM protein - protein search, using sw model

Run on: January 7, 2002, 15:40:13 ; Search time 154.28 Seconds

Title: US-08-569-749-9

Sequence: 1 PEQLASAGFYVGRNDVKC.....CWESGDDPWVEHAKWFPRCE 4E

Scoring table: BLOSUM62

Searched: 522463 seqs, 74073290 residues

Total number of hits satisfying chosen parameters: 5222463

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Minimum DB seq length: 0
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Maximum DB seq length: 2000000000

Post-processing: Minimum Match 08

Database :

1. *SLDS2.gcgdata/genseq/genseqp/AA1980.DAT* : *
 A.Genseq.1101 : *
 2. *SLDS2.gcgdata/genseq/genseqp/AA1981.DAT* : *
 3. *SLDS2.gcgdata/genseq/genseqp/AA1982.DAT* : *
 4. *SLDS2.gcgdata/genseq/genseqp/AA1983.DAT* : *
 5. *SLDS2.gcgdata/genseq/genseqp/AA1984.DAT* : *
 6. *SLDS2.gcgdata/genseq/genseqp/AA1985.DAT* : *
 7. *SLDS2.gcgdata/genseq/genseqp/AA1986.DAT* : *
 8. *SLDS2.gcgdata/genseq/genseqp/AA1987.DAT* : *
 9. *SLDS2.gcgdata/genseq/genseqp/AA1988.DAT* : *
 10. *SLDS2.gcgdata/genseq/genseqp/AA1989.DAT* : *
 11. *SLDS2.gcgdata/genseq/genseqp/AA1990.DAT* : *
 12. *SLDS2.gcgdata/genseq/genseqp/AA1991.DAT* : *
 13. *SLDS2.gcgdata/genseq/genseqp/AA1992.DAT* : *
 14. *SLDS2.gcgdata/genseq/genseqp/AA1993.DAT* : *
 15. *SLDS2.gcgdata/genseq/genseqp/AA1994.DAT* : *
 16. *SLDS2.gcgdata/genseq/genseqp/AA1995.DAT* : *
 17. *SLDS2.gcgdata/genseq/genseqp/AA1996.DAT* : *
 18. *SLDS2.gcgdata/genseq/genseqp/AA1997.DAT* : *
 19. *SLDS2.gcgdata/genseq/genseqp/AA1998.DAT* : *
 20. *SLDS2.gcgdata/genseq/genseqp/AA1999.DAT* : *
 21. *SLDS2.gcgdata/genseq/genseqp/AA2000.DAT* : *
 22. *SLDS2.gcgdata/genseq/genseqp/AA2001.DAT* : *

Pred. NO. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed and is derived by analysis of the total score distribution.

SUMMARIES

Result No	Score	Query Match	length	DB	ID	Description
1	295	100.0	48	18	AAAI13551	Human c-IAP1 repress
2	295	100.0	438	17	AAAO4583	Human inhibitor of
3	295	100.0	618	18	AAAI19746	Human inhibitor of
4	295	100.0	618	18	AAAI13545	Human c-IAP1. Hom
5	295	100.0	618	20	AAV33998	Human cellular inh
6	283	95.9	618	18	AAAI19583	Human apoptosis in
7	283	95.9	618	19	AAAG9296	Human HIP-2 prote
8	282	95.6	48	18	AAAI13552	Human c-IAP2 repres
9	282	95.6	604	18	AAAI19747	Human inhibitor of
10	282	95.6	604	18	AAAI19582	Human apoptosis in
11	282	95.6	604	18	AAAI13546	Human c-IAP2. Hom

[illegible]

PS Claim 3; Page 25; 35pp; English.

XX The human cellular inhibitor of apoptosis proteins (c-IAP1/2 -
CC AAT61590/T61591) comprise a series of defined structural domain
CC repeats and/or a RING finger domain; in particular, at least two of
CC a first domain repeat (AAW13547 or AAW13548), a second domain repeat
CC (AAW13549 or AAW13550), and a third domain repeat (AAW13551 or AAW13552)
CC and/or a RING finger domain (AAW13553 or AAW13554), or a consensus
CC sequences derived from these human genes.
CC The nucleic acid is used for recombinant prodn. of human cellular
CC inhibitor of apoptosis protein which modulates apoptosis
CC regulation. The nucleic acids are useful in therapies where
CC increased cell-specific apoptosis is desired, e.g. in restinosis,
CC inflammatory disease states, myocardial infarction, glomerular
CC nephritis, transplant rejection and infectious diseases, e.g. HIV.
CC They can also be used in conditions requiring a reduction in
CC apoptosis.

SO Sequence 48 AA:

Query Match 100.0%; Score 295; DB 18; Length 48;
Best Local Similarity 100.0%; Pred. No. 3.7e-29;
Matches 48; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 PEOIASAGFYVGRNDVKPCDGLRCWESGDDPWVHAHAKWPRCE 48
Db 1 peqlasagfiyygrndvkcfcddgslrcwesgddpwvhenakwfpnce 48

RESULT 2

AAW04583
ID AAW04583 standard; Protein; 438 AA.

XX AAW04583;

DT 07-FEB-1997 (first entry)

DE Human inhibitor of apoptosis gene 1.

KW Inhibitor of apoptosis 1; hIAP-1; degenerative disease;

KW rheumatoid arthritis; septic shock; antiviral; trauma; stroke;

KW cell death; oncogenesis; cancer; diagnosis; therapy.

OS Homo sapiens.

PN W09635703-A1.

PD 14-NOV-1996.

PF 11-MAY-1995; 95WO-US05922.

PR 11-MAY-1995; 95WO-US05922.

PA (HUMA-) HUMAN GENOME SCI INC.

PI He MW, Hudson PL, Rosen CA;

DR WPI: 1996-518608/51.

PT N-PSDB; AAT43709.

XX Polynucleotide encoding human inhibitor of apoptosis gene 1 - useful
PT for treating degenerative diseases, as antiviral defence mechanism
XX and preventing cell death during trauma and strokes

PS Claim 1; Page 40-41; 53pp; English.

XX Human inhibitor of apoptosis 1 (hIAP-1) (AAW04583) is a protein
CC useful for treating degenerative diseases, rheumatoid arthritis,
CC septic shock, as an antiviral defence mechanism, and for
CC preventing cell death during strokes or trauma. Its amino acid
CC sequence was deduced from a cDNA clone (AAT43709) that can be obt.
CC from human Jurkat cell lines or human osteoclastoma stromal cell

CC lines. Recombinant hIAP-1 can be produced in prokaryotic or
CC eukaryotic host cells, or expressed in vivo. It can also be used
CC to screen for modulators of hIAP-1 activity.

SO Sequence 438 AA:

Query Match 100.0%; Score 295; DB 17; Length 438;
Best Local Similarity 100.0%; Pred. No. 3.7e-28;
Matches 48; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 PEOIASAGFYVGRNDVKPCDGLRCWESGDDPWVHAHAKWPRCE 48
Db 107 peqlasagfiyygrndvkcfcddgslrcwesgddpwvhenakwfpnce 154

RESULT 3

AAW19746
ID AAW19746 standard; Protein; 618 AA.

XX AAW19746;

DT 16-SEP-1997 (first entry)

DE Human inhibitor of apoptosis protein homologue M1HB.

KW Inhibitor of apoptosis protein; IAP; mammalian IAP homologue; M1HB;

KW degenerative disease; infectious disease; autoimmune disease;

KW cancer; therapy; diagnosis.

OS Homo sapiens.

PN W09723501-A1.

PD 03-JUL-1997.

PF 20-DEC-1996; 96WO-AU00827.

PR 22-DEC-1995; 95AU-0007275.

PA (AMRA-) AMRAD OPERATIONS PTY LTD.

PI Vaux DL;

DR WPI: 1997-350966/32.

PT N-PSDB; AAT72711.

XX Isolated protein homologues of viral inhibitors of apoptosis - used
PT to modulate apoptosis for treatment of degenerative, infectious or
XX autoimmune diseases and cancer

PS Claim 8; Page 51-54; 136pp; English.

XX Mammalian IAP homologue B (M1HB) (AAW19746) is a human homologue of
CC baculovirus inhibitor of apoptosis protein (IAP). Its amino acid
CC sequence was deduced from a cDNA clone (see also AAT72711) isolated
CC from a human foetal liver cDNA library using primers based on
CC human Est sequences that resembled the BIR repeats of Orf1a
CC pseudotsuguta polyhedrosis virus IAP. IAP homologues (see also
CC AAW19745 and AAW19747-52) and their derivatives and chemical analogues
CC can be used in methods for modulating apoptosis in animal cells,
CC specifically for treatment, by inhibition, of degenerative and
CC infectious disease or, by promotion, of cancer and autoimmune

[illegible]

KX	Inhibitor of apoptosis protein; Apoptosis enhancer; NAIP polypeptide;
XW	Proliferative disease; IAP; therapy; cancer; human; HIAF-2 protein.
XX	Homo sapiens.
OS	Molecular function:
XX	MO9835693-A2.
PN	Nucleotide binding site activity.
PP	Catalytic domain.
PD	Enzyme classification.
PC	EC number.
PR	Accession numbers.
PA	(UNOT-) UNIV OTTAWA.
PI	Bald S., Korneluk R., Liston P., Mackenzie AE., Pratt C,
PT	Tsang B:
PS	NAIP: A novel inhibitor of apoptosis in mammalian cells.
DR	PMID: 1998-467164/40.
XX	N-PDB: AAU55040.
CC	The sequence is the human HIAF-2 protein, which is an inhibitor of apoptosis protein (IAP), and can be used in the method of the invention. The method is for enhancing apoptosis in cells from a mammal with proliferative disease by treatment with a compound that inhibits biological activity of an IAP or NAIP polypeptide. The inhibitors compounds are used to treat proliferative diseases. The inhibitors may include, breast, pancreas, lymph nodes, skin, blood, lung, brain, kidney, liver, nasopharynx, thyroid, central nervous system, prostate, colon, rectum, cervix or endometrium, particularly to increase their sensitivity to chemotherapeutic agents. High levels of the IAP or NAIP proteins are detected in many cancers and are associated with poor prognosis, resistance to chemotherapeutic agents and mutations in p53 (It is suggested that wild-type p53 suppresses transcription of the IAP or NAIP genes). Transgenic animals are used for testing the effects of antisense oligonucleotides and for screening for the inhibitors.
SQ	Sequence 618 AA: Query Match 95.9%; Score 283; DB 19; Length 618; Best Local Similarity 97.9%; Pred.No. 1,6e-26; Matches 47; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
OY	1 PEQLASAGFYVGRNDVDKVCFCDDGGLRKMSSGDGPVEHAHAFPRE 48 DY 287 peqlasagfyvgrndvdvkvcfcddgglrkmssgdgpvehakwfpce 334
ID	AAM13552 standard; Protein; 48 AA.
AC	AAM13552;
DJ	22-JUL-1997 (first entry)
DE	Human c-IAP2 repeat 3.
IAP	Inhibitor of apoptosis; RING finger domain; restinosis;
KM	Myocardial infarction; nephritis; HIV.
OS	Homo sapiens.
NN	WO9706182-A1.

XX	PD	20-FEB-1997.
XX	Pf	06-AUG-1996; 96MO-US12860.
XX	PR	08-DEC-1995; 95US-0569749.
XX	PR	08-AUG-1995; 95US-0512946.
XX	PA	(TULA-) TULARIX INC.
PI	Goeddel DV,	Rothe M;
DR	WPI,	1997-154209/14.
PT	Nucleic acids encoding cellular inhibitor of apoptosis proteins -	
PT	useful for apoptosis regulation in cells to reduce or increase	
PT	apoptosis and for pharmacological screening	
PS	Claim 3; Page 25; 35pp:	English.
XX	The human cellular inhibitor of apoptosis proteins (C-IAP1/2 -	
CC	Aat61590/761591) comprise a series of defined structural domain	
CC	repeats and/or a RING finger domain; in particular, at least two of	
CC	a first domain repeat (AAW13547 or AAW13548), a second domain repeat	
CC	(AAW13549 or AAW13550), and a third domain repeat (AAW13551 or AAW13552)	
CC	and/or a RING finger domain (AAW13553 or AAW13554), or a consensus	
CC	sequences derived from these human genes.	
CC	The nucleic acid is used for recombinant prodn. of human cellular	
CC	inhibitor of apoptosis protein which modulates apoptosis	
CC	regulation. The nucleic acids are useful in therapies where	
CC	increased cell-specific apoptosis is desired, e.g. in restitosis,	
CC	inflammatory disease states, myocardial infarction, glomerular	
CC	nephritis, transplant rejection and infectious diseases, e.g. HIV.	
CC	They can also be used in conditions requiring a reduction in	
CC	apoptosis.	
SO	Sequence 48 AA:	
OY	Query Match 95.6%; Score 282; DB 18; Length 48;	
OY	Best Local Similarity 93.8%; Pred. NO. 1.4e-27;	
Db	Matches 45; Conservative 2; Mismatches 1; Indels 0; Gaps 0;	
OY	1 PEGLASAGFTYYNGRANDVKCCDCGLRWRSGDPVPEHAKRPICE 48	
Db	I peglasagftyyngnsdvcctcdcgglrtcwesgdpvgnakwprice 48	
RESULT 9		
AAW19747		
ID	AAW19747 standard; Protein: 604 AA.	
AC		
NC	AAW19747:	
DT	16-SEP-1997 (first entry)	
DE	Human inhibitor of apoptosis protein homologue MHC.	
KM	Inhibitor of apoptosis protein; IAP; mammalian IAP homologue; MHC;	
KM	degenerative disease; infectious disease; autoimmune disease;	
OS	Cancer; Therapy: diagnosis.	
XX	Homo sapiens.	
XX	Key	Location/Qualifiers
FH	Region	29..97
FT	/label= BIR	
FT	Region	169..236
FT	/label= BIR	
FT	Region	255..323
FT	/label= BIR	
FT	Region	556..593
FT	/label= RING_finger	

	P	N	M09723501-A1.	
XN		P	D	03-JUL-1997.
XX		P	E	20-DEC-1996; 96MO-AU00827.
XX		P	R	22-DEC-1995; 95AU-0007275.
PA	(AMRA-)	A	M	RAD OPERATIONS PTY LTD.
PI	Vaux DL;			
DR	WPI: 1997-350966/32.			
XX	N-PSTDB: AAT72712.			
PT	Isolated protein homologues of viral inhibitors of apoptosis - used			
PR	to modulate apoptosis for treatment of degenerative, infectious or			
PS	autoimmune diseases and cancer			
XX				
PS	Claim 9: Page 58-62; 136pp; English.			
CC	Mammalian IAP homologue C (MHC) (AAAI9747) is a human homologue of			
CC	baculovirus inhibitor of apoptosis protein (IAP). Its amino acid			
CC	sequence was deduced from a cDNA clone (see also AA72712) isolated			
CC	from a human foetal liver cDNA library using primers based on			
CC	human EST sequences that resembled the BIR repeats of Oryza			
CC	pseudotsugata polyhedrosis virus IAP. IAP homologues (see also			
CC	AAAI9745-46 and AAAI9748-52) and their derivatives and chemical			
CC	analogs can be used in methods for mediating apoptosis in animal			
CC	cells specifically for treatment, by inhibition, of degenerative			
CC	and infectious disease or, by promotion, of cancer and autoimmune			
CC	disease.			
SQ	Sequence 604 AA:			
Oy	Query Match	95.6%	Score 282,	DB 18; Length 604;
	Best Local Similarity	93.8%;	Pred. No. 2e+26;	
Db	Matches 45; Conservative	2;	Mismatches 1;	Indels
	1 PEOLASAGPYVGHNDDVVCPCGCGCIGRCMGSDPDWEHAKMPFCE 48 peqlasagfyygnsddvkcctcdggllrcwsggdpmvgkhakwpfce 320		Gaps	0;
	RESULT 10			
AAA19582	AAA19582 standard; Protein: 604 AA.			
XX	AAA19582:			
XX				
DT	02-SEP-1997 (first entry)			
XA	Human apoptosis inhibitor HAMP-1.			
ME				
KA	Apoptosis Inhibitor: HAMP-1; HIV; AIDS; neurodegeneration;			
KM	myelodysplastic syndrome; Ischaemia; mucocutaneous infection; stroke;			
KW	reperfusion injury; toxin-induced liver disease; gene therapy;			
KX	diagnosis.			
CS	Homo sapiens.			
FA	Key			
FH	Domain	Location/Qualifiers		
FT	/label= BIR-1	25..96		
FF	Domain	169..235		
FT	/label= BIR-2	255..322		
FE	Domain	/label= BIR-3		
FL	Domain	546..591		
FX	/label= Ring_zinc_finger			

PN	M09706255-A2.
PD	20-FEB-1997.
PP	05-AUG-1996; 96MO-1801022.
PR	22-DEC-1995; 95US-0576956.
PR	04-AUG-1995; 95US-0511465.
XX	(UYOT-) UNIV OTTAWA.
PA	Baird S, Korneluk RG, Liston P, Mackenzie AE;
P1	WPI: 1997-154262/14.
DR	N-PsDB: AAT70837.
XX	
PT	Nucleic acid encoding an inhibitor of apoptosis polypeptide - used
PT	to inhibit apoptosis in e.g. HIV or AIDS patients, and for detection
PS	of susceptibility to apoptotic disease
XX	
PS	Claim 27: Page 72-74; 21pp; English.
CC	Human XIAP, HIAP-1 and HIAP-2 and murine M-XIAP, M-HIAP-1 and
CC	M-HIAP-2 (AAH19581-86) are a new class of mammalian proteins that
CC	are inhibitors of apoptosis (IAP) and which are characterized by
CC	the presence of a ring zinc finger domain (see also AAH19587 and at
CC	least one RING (baculovirus IAP repeat) domain (see also AAH19589) and at
CC	The HIAP amino acid sequences were deduced from cDNA clones (AAH70837
CC	and AAH70838) from a human liver library. IAP polypeptides can be
CC	expressed in host cells (in vitro or in vivo) and used in methods
CC	for treating diseases and disorders involving apoptosis, esp. in a
CC	human diagnosed as HIV positive or as having AIDS, a
CC	neurodegenerative disease, a myelodysplastic syndrome or an
CC	ischemic injury, selected from myocardial infarction, stroke,
CC	reperfusion injury, or a toxin-induced liver disease.
XX	
SQ	Sequence 604 AA:
Query Match	95.6% Score 282; DB 18; Length 604;
Best Local Similarity	93.8%; Pred. No. 2e-26; 1; Indels
Matches 43; Conservative 2; Mismatches 0; Gaps 0;	
OY	1 PEQLASAGTYTGANDVAKCCECDGLRCWESGDDPWZHAHWPFCE 48
Db	273 peqlasagtytgandsdvkccfcdgslrcwsgddpwzhaakwprce 320
RESULT 11	
ID	AAH13546 standard; Protein: 604 AA.
AC	AAH13546;
DE	22-JUL-1997 (first entry)
DT	
XX	Human C-IAP2.
KM	IAP: Inhibitor; apoptosis; RING finger domain; restenosis;
KW	myocardial infarction; nephritis; HIV.
OS	Homo sapiens.
PN	W09706182-A1.
PD	20-FEB-1997.
PP	06-AUG-1995; 96MO-US12860.
PR	08-DEC-1995; 95US-0569749.
PR	08-AUG-1995; 95US-0512946.
TA	(TULA-) TULARIK INC.

Pt	Nucleic acids encoding cellular inhibitor of apoptosis proteins -
Pf	useful for apoptosis regulation in cells to reduce or increase
Pt	apoptosis and for pharmacological screening
Fs	
Xx	disclosure; Page 21-23; 35pp; English.
Cc	The human cellular inhibitor of apoptosis proteins (C-IAP1/2 -
Cc	AAM1590/T61591) comprise a series of defined structural domain
Cc	repeats and/or a RING finger domain; in particular, at least two of
Cc	a first domain repeat (AAM13547 or AAM13548), a second domain repeat
Cc	(AAM13549 or AAM13550), and a third domain repeat (AAM13551 or AAM13552)
Cc	and/or a RING finger domain (AAM13553 or AAM13554), or a consensus
Cc	sequence derived from these human genes.
Cc	The nucleic acid is used for recombinant prodn. of human cellular
Cc	inhibitor of apoptosis protein which modulates apoptosis
Cc	regulation. The nucleic acids are useful in therapies where
Cc	increased cell-specific apoptosis is desired, e.g., in restenosis,
Cc	inflammatory disease states, myocardial infarction, glomerulonephritis,
Cc	transplant rejection and infectious diseases, e.g. HIV.
Cc	They can also be used in conditions requiring a reduction in
Cc	apoptosis.
Sd	
Xx	Sequence 604 AA:
Dy	Query Match 95.6%; Score 282; DB 18; Length 604;
Dy	Best Local Similarity 93.8%; Pred. No. 2e-26; I: Indels 0; Gaps 0
Matches	45; Conservative 2; Mismatches 1;
OY	1 PEOLASAGTYVGRNDVKRCFCGGLRQESGGDPWEHAKNPRCE 48 Db 273 pqaiaasgityyvgrndvkcfcggllrqsagdpwghakmpirce 320
RESULT 12	
ID	AAM69295 standard; Protein; 604 AA.
XX	
AC	AAM69295;
DT	13-NOV-1998 (first entry)
DE	Human HIAP-1 protein.
XX	
XX	Inhibitor of apoptosis protein; apoptosis enhancer; NAIIP polypeptide; proliferative disease; IAP; therapy; cancer; human; HIAP-1 protein..
OS	Homo sapiens.
XX	
FN	WO9353693-A2.
PD	20-AUG-1998.
PF	13-FEB-1998; 98MO-IB00781.
PR	13-FEB-1997; 97US-0800929.
PA	(UYOT-) UNIV OTTAWA.
XX	
XX	Bald S, Korneluk R, Liston P, Mackenzie AE, Pratt C;
XX	Tsang B;
DR	WPI; 1998-467164/40.
DR	N-Psdb; AAV55039.
PT	Inducing apoptosis in proliferative mammalian cells with inhibitor
PT	of IAP or NAIP polypeptide - also methods for prognosis based on

PT presence of IAP and NAIP, specifically applied to cancers involving
 PT p53 mutations

PS Disclosure: Fig 2: 147pp: English.

CC This sequence is the human H1AP-1 protein, which is an inhibitor of
 CC Apoptosis protein (IAP), and can be used in the method of the invention.
 CC The method is for enhancing apoptosis in cells from a mammal with
 CC proliferative disease by treatment with a compound that inhibits
 CC biological activity of an IAP or NAIP polypeptide. The inhibitory
 CC compounds are used to treat proliferative diseases, specially cancers of
 CC ovary, breast, pancreas, lymph nodes, skin, blood, lung, brain, kidney,
 CC liver, nasopharynx, thyroid, central nervous system, prostate, colon,
 CC rectum, cervix or endometrium, particularly to increase their sensitivity
 CC to chemotherapeutic agents. High levels of the IAP or NAIP proteins are
 CC detected in many cancers and are associated with poor prognosis,
 CC resistance to chemotherapeutic agents and mutations in p53 (it is
 CC suggested that wild-type p53 suppresses transcription of the IAP or NAIP
 CC genes). Transgenic animals are used for testing the effects of antisense
 CC oligonucleotides and for screening for the inhibitors.

SO Sequence 604 AA:

Query Match 95.6%; Score 282; DB 19; Length 604;
 Best Local Similarity 93.8%; Pred. No. 2e-26; 1; Indels 0; Gaps 0;
 Matches 45; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

OY 1 PQLASAGFYVGRNDYKRCFCGGLRCWESGDDPWVWNAKMPFCE 48
 |||
 DB 273 pqlasagfyyvgsndvKxcfcddgllrcwesgddpwvghakwiprce 320

RESULT 13

AAV52703 standard; Protein: 604 AA.

AC AAV52703;

DT 26-JAN-2000 (first entry)

DE Human cellular inhibitor of apoptosis-2 protein.

XX Identification; genetic target; gene modulation; human;

KW antisense oligonucleotide; phosphorothioate; target validation;

KW nucleotide sequence-based technology; antisense drug discovery.

OS Homo sapiens.

PN W0953101-A1.

PD 21-OCT-1999.

PF 13-APR-1999; 99MO-US08268.

PR 13-APR-1998; 98US-0081483.

PR 28-APR-1998; 98US-0067638.

PA (ISIS-) ISIS PHARM INC.

PI Cowsert LM, Baker BF, McNeill J, Freier SM, Sasmor HM, Brooks DG;
 Ohnishi C, Wyatt JR, Borchers AH, Vickers TA;

DR N-PSDB: AA241005.

XX Identifying compounds which modulate expression of nucleic acids, used
 PT to provide compounds having defined physical, chemical or bioactive
 PT properties, e.g. antisense activity -

PS Example 20: Page 197-202; 264pp: English.

CC A method has been developed of defining a set of compounds that modulate

CC the expression of a target nucleic acid (tNA) sequence via binding of
 CC the compounds with the tNA sequence. The method comprises generating a
 CC library of virtual compounds in silico according to defined criteria,
 CC and evaluating in silico the binding of the virtual compounds with the
 CC tNA according to defined criteria. Also described are: (1) a method of
 CC defining a set of oligonucleotides (ONS) that modulate the expression of
 CC a tNA sequence via binding of the ONS with the tNA sequence comprising
 CC generating a library of virtual compounds in silico according to defined
 CC criteria, and evaluating in silico the binding of the virtual ONS with
 CC the tNA according to defined criteria; and (2) a method of defining a
 CC set of compounds that modulate the expression of a tNA sequence via
 CC binding of the compounds with the tNA. The methods can be used for the
 CC generation and identification of synthetic compounds having defined
 CC physical, chemical or bioactive properties. Information gathered from
 CC assays of such compounds is used to identify nucleic acid sequences that
 CC are tractable to a variety of nucleotide sequence-based technologies,
 CC e.g. antisense drug discovery and target validation. AA240852 to
 CC AA241220, and AAV52701 to AAV52706, represent sequences used in the
 CC exemplification of the present invention.

SO Sequence 604 AA:

Query Match 95.6%; Score 282; DB 20; Length 604;
 Best Local Similarity 93.8%; Pred. No. 2e-26; 1; Indels 0; Gaps 0;
 Matches 45; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

OY 1 PQLASAGFYVGRNDYKRCFCGGLRCWESGDDPWVWNAKMPFCE 48
 |||
 DB 273 pqlasagfyyvgsndvKxcfcddgllrcwesgddpwvghakwiprce 320

RESULT 14

AAV33997 standard; Protein: 604 AA.

AC AAV33997;

DT 26-NOV-1999 (first entry)

DE Human cellular inhibitor of apoptosis-2 sequence.

XX Cellular inhibitor of Apoptosis-2; antisense; diagnostic; therapeutic;
 KW c-IAP-2; prophylaxis; infection; inflammation; tumor formation.

OS Homo sapiens.

PN US5958771-A.

PD 28-SEP-1999.

PF 03-DEC-1998; 98US-0205144.

PR 03-DEC-1998; 98US-0205144.

PA (ISIS-) ISIS PHARM INC.

PI Bennett CF, Cowsert LM, Ackermann EJ;

DR N-PSDB: AA222096.

XX Antisense compounds complementary to Cellular Inhibitor of Apoptosis-2
 PT useful for e.g. diagnostics, therapeutics, and as research reagents -

PS Example 13: Columns 45-50; 33pp: English.

XX The invention provides antisense compounds of 8-30 nucleotides that
 CC inhibit the expression of human Cellular Inhibitor of Apoptosis-2
 CC (c-IAP-2). The antisense compounds may be used for diagnostics,
 CC therapeutics (for modulating the expression of c-IAP-2), prophylaxis
 CC (e.g. to prevent or delay infection, inflammation, or tumor formation),
 CC as research reagents (e.g. to distinguish between members of a biological

CC family)

CC pathway) and in kits. The present sequence represents the human cellular
 CC inhibitor of apoptosis-2.
 XX
 SO Sequence 604 AA:

Query Match 95.6%: Score 282; DB 20; Length 604;
 Best Local Similarity 93.8%: Pred. No. 2e-26;
 Matches 45; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 1 PEQLASAGFYVGNDDVCKFCDCDGLRCWESGDDPWVEHAKWPRCE 48
 |||||
 DB 273 PEQLASAGFYVGNDDVCKFCDCDGLRCWESGDDPWVEHAKWPRCE 320

RESULT 15
 AAW13555
 ID AAW13555 standard; Protein; 612 AA.
 XX
 AC AAW13555;
 XX
 DT 22-JUL-1997 (first entry)
 XX
 DE Murine c-IAP.
 XX
 KM IAP; Inhibitor; apoptosis; ring finger domain; restinosis;
 KM myocardial infarction; nephritis; HIV.
 XX
 OS Mus musculus.
 XX
 PN WO9706182-A1.
 XX
 PD 20-FEB-1997.
 XX
 PF 06-AUG-1996; 96MO-US12860.
 XX
 PR 08-DEC-1995; 95US-0569749.
 PR 08-AUG-1995; 95US-0512946.
 XX
 PA (TUL-) TULARIK INC.
 XX
 PI Goeddel DV, Rothe M;
 XX
 DR WPI. 1997-154209/14.
 DR N-PSDB; AAT61592.
 XX
 PT Nucleic acids encoding cellular inhibitor of apoptosis proteins -
 PT useful for apoptosis regulation in cells to reduce or increase
 PT apoptosis and for pharmacological screening
 XX
 PS Disclosure; Page 28-29; 35pp; English.
 XX
 CC The human cellular inhibitor of apoptosis proteins (c-IAP1/2 -
 CC AAT61590/T61591) comprise a series of defined structural domain
 CC repeats and/or a ring finger domain; in particular, at least two of
 CC a first domain repeat (AAW13547 or AAW13548), a second domain repeat
 CC (AAW13549 or AAW13550), and a third domain repeat (AAW13551 or AAW13552)
 CC and/or a ring finger domain (AAW13553 or AAW13554), or a consensus
 CC sequences derived from these human genes.
 CC The nucleic acid is used for recombinant prodn. of human cellular
 CC inhibitor of apoptosis protein which modulates apoptosis
 CC regulation. The nucleic acids are useful in therapies where
 CC increased cell-specific apoptosis is desired, e.g. in restinosis,
 CC inflammatory disease states, myocardial infarction, glomerular
 CC nephritis, transplant rejection and infectious diseases, e.g. HIV.
 CC They can also be used in conditions requiring a reduction in
 CC apoptosis.
 XX
 SO Sequence 612 AA:

Matches 45; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
 QY 1 PEQLASAGFYVGNDDVCKFCDCDGLRCWESGDDPWVEHAKWPRCE 48
 |||||
 DB 280 PEQLASAGFYVGNDDVCKFCDCDGLRCWESGDDPWVEHAKWPRCE 327

Search completed: January 7, 2002, 15:40:13
 Job time: 172 sec

Query Match 95.6%: Score 282; DB 18; Length 612;
 Best Local Similarity 93.8%: Pred. No. 2e-26;
